



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,199	06/23/2003	Johan Eriksson	4010-28	6414
23117 7590 03/15/2010 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER				
KANERVO, VIRPI H				
ART UNIT		PAPER NUMBER		
3691				
MAIL DATE		DELIVERY MODE		
03/15/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/601,199

**Applicant(s)**

ERIKSSON, JOHAN

**Examiner**

VIRPI H. KANERVO

**Art Unit**

3691

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 December 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-6,8 and 10-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8 and 10-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Status of the Claims***

1. Claims 1, 3-6, 8, and 10-20, are presented for examination. Applicant filed an amendment on 12/31/2009, amending claims 1, 4-6, 8, and 11-13; and adding new claims 15-20. In light of Applicant's amendments, Examiner withdraws the §101 rejection of claims 8 and 10-14, and the §103 rejection of claims 1, 3-6, 8, and 10-14. However, new grounds of §103 rejection are established for claims 1, 3-6, 8, and 10-20, in the instant Office action.

### ***Response to Arguments***

2. In light of Applicant's amendments, Examiner withdraws the §101 rejection of claims 8 and 10-14,
3. In light of Applicant's amendments, Examiner withdraws the §103 rejection of claims 1, 3-6, 8, and 10-14. However, new grounds of §103 rejection are established for claims 1, 3-6, 8, and 10-20, in the instant Office action.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in § 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-4, 6, 8, 10-11, 13-14, 16-17, and 19-20, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kruskal (5,918,052) in view of Lea (2005/0209940 A1), and further in view of Indeval (*Disclosure Framework For Securities Settlement System*; October 3, 2000).

As to claims 1 and 8, Kruskal shows defining in the computer-implemented system each of the subclasses and each of the classes by attributes, where each attribute has an associated one of plural inheritance characteristics (Kruskal: col. 2, lines 7-33); configuring, by the computer, the financial instruments and financial instrument templates together in a hierarchical multi-level structure based on the attributes and their associated inheritance characteristics (Kruskal: col. 2, lines 7-33); defining, by the computer, a subclass or class on one level in the hierarchy by selectively inheriting, dependent upon the associated inheritance characteristics of the attributes, the attributes of a class on a

next higher hierarchical level (Kruskal: col. 2, lines 7-33); and linking, by the computer, each subclass to a class on the next higher hierarchical level (Kruskal: col. 2, lines 7-33).

Kruskal does not show providing financial instruments and financial instrument templates for safekeeping in a computer-implemented system that includes a computer; and that each of the subclasses are financial instruments and each of the classes are the templates for financial instruments. Lea shows providing financial instruments and financial instrument templates for safekeeping in a computer-implemented system that includes a computer (Lea: page 3, ¶¶ 39-40 and ¶ 45); and that each of the subclasses are financial instruments and each of the classes are the templates for financial instruments (Lea: page 2, ¶ 21). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method and the system of Kruskal by providing financial instruments and financial instrument templates for safekeeping in a computer-implemented system that includes a computer; and that each of the subclasses are financial instruments and each of the classes are the templates for financial instruments of Lea in order to provide a method for use in evaluation of the credit exposure of a portfolio of financial instruments (Lea: page 1, ¶ 1).

Kruskal in view of Lea does not show a Centralized Securities Depository (CSD)-system. Indeval shows a Centralized Securities Depository (CSD)-system (Indeval: page 1). It would have been obvious to

one of ordinary skill in the art at the time of the invention to have modified the system of Kruskal in view of Lea by a Centralized Securities Depository (CSD)-system of Indeval for the purpose of using custodial and related services provided by the CSD system (Indeval: pages 2-3).

As to claims 3 and 10, Kruskal in view of Lea, and further in view of Indeval, shows all the elements of claims 1 and 8. Kruskal also shows that any amendment to an attribute in a financial instrument template causes the same amendment in the same attribute of those financial instruments or financial instrument template which are linked to the amended financial instrument or financial instrument template and which are on lower levels in the hierarchy than the amended financial instrument template (Kruskal: col. 2, lines 16-33).

As to claims 4 and 11, Kruskal in view of Lea, and further in view of Indeval, shows all the elements of claims 1 and 8. Kruskal also shows that the financial instruments placed on the next higher level of the hierarchy are financial instrument templates on a lower level of the hierarchy (Kruskal: col. 2, lines 18-25).

As to claims 6 and 13, Kruskal in view of Lea, and further in view of Indeval, shows all the elements of claims 1 and 8. Kruskal also shows that financial instrument templates in the hierarchy only given one link to a

level above their own level can have more than one link to levels below their own level (Kruskal: col. 2, lines 7-13 and 30-33).

As to claim 14, Kruskal in view of Lea, and further in view of Indeal, shows all the elements of claim 8. Kruskal also shows that finding an existing financial instrument or financial instrument template in the CSD-system which has all of the attributes of the financial instrument which is to be added (Kruskal: col. 2, lines 18-21); placing the financial instrument which is to be added on a level in the hierarchy which is below said existing financial instrument or financial instrument template (Kruskal: col. 2, lines 21-27 and 28-33); and creating a link between the financial instrument to be added and the existing financial instrument or financial instrument template to thereby add the financial instrument to the CSD system (Kruskal: col. 2, lines 27-28).

As to claims 16 and 19, Kruskal in view of Lea, and further in view of Indeal, shows all the elements of claims 8 and 1. Kruskal also shows that each of at least some of the attributes has an associated value that may be inherited at the one level in the hierarchy along with its associated attribute (Kruskal: col. 2, lines 18-27).

As to claims 17 and 20, Kruskal in view of Lea, and further in view of Indeal, shows all the elements of claims 16 and 19. Kruskal also shows

that each attribute value has an associated inheritance characteristic, and wherein inheritance of each attribute value to a next lower level in the hierarchy depends on its associated inheritance characteristic (Kruskal: col. 2, lines 18-27).

6. Claims 5 and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kruskal in view of Lea, further in view of Indeval, and further in view of Ku (2002/0073078 A1).

As to claims 5 and 12, Kruskal in view of Lea, and further in view of Indeval, shows all the elements of claims 1 and 8. Kruskal in view of Lea, and further in view of Indeval, does not show that a highest hierarchical level includes financial instrument templates that cannot be traded within the CSD-system and financial instrument templates in lower levels in the hierarchy are also financial instruments which can be traded within the CSD-system. Ku shows that a highest hierarchical level includes financial instrument templates that cannot be traded within the CSD-system and financial instrument templates in lower levels in the hierarchy are also financial instruments which can be traded within the CSD-system (Ku: page 1, ¶ 12). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method and the system of Kruskal in view of Lea, and further in view of Indeval, by a highest hierarchical level including financial instrument templates that cannot be



traded within the CSD-system and financial instrument templates in lower levels in the hierarchy are also financial instruments which can be traded within the CSD-system of Ku in order to represent in a flow chart form all possible combinations of steps, branches and decision points interrelating the processes which are executing at the same time (Ku: page 1, ¶ 6).

7. Claims 15 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kruskal in view of Lea, further in view of Indeval, further in view of Priven (5,327,559), and further in view of Ku.

As to claims 15 and 18, Kruskal in view of Lea, and further in view of Indeval, shows all the elements of claims 8 and 1. Kruskal in view of Lea, and further in view of Indeval, does not show that the plural inheritance characteristics include mandatory and exclude inheritance characteristics; wherein a mandatory inheritance characteristic means that the associated attribute must be inherited by the financial instrument or financial instrument template on one level in the hierarchy from the financial instrument template on the next higher level in the hierarchy; and an exclude inheritance characteristic means that the associated attribute shall not be inherited by the financial instrument or financial instrument template on one level in the hierarchy from the financial instrument template on the next higher level in the hierarchy. Priven shows that the plural inheritance characteristics include mandatory and exclude inheritance characteristics

(Priven: col. 12, lines 34-47); wherein a mandatory inheritance characteristic means that the associated attribute must be inherited by the financial instrument or financial instrument template on one level in the hierarchy from the financial instrument template on the next higher level in the hierarchy (Priven: col. 12, line 50); and an exclude inheritance characteristic means that the associated attribute shall not be inherited by the financial instrument or financial instrument template on one level in the hierarchy from the financial instrument template on the next higher level in the hierarchy (Priven: col. 12, line 51). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method and the system of Kruskal in view of Lea, and further in view of Indeval, by the plural inheritance characteristics including mandatory and exclude inheritance characteristics; wherein a mandatory inheritance characteristic means that the associated attribute must be inherited by the financial instrument or financial instrument template on one level in the hierarchy from the financial instrument template on the next higher level in the hierarchy; and an exclude inheritance characteristic means that the associated attribute shall not be inherited by the financial instrument or financial instrument template on one level in the hierarchy from the financial instrument template on the next higher level in the hierarchy of Priven in order to enable PDI to automatically format and unformat object oriented instances in an OOPS (Priven: col. 12, lines 58-60).

Kruskal in view of Lea, further in view of Indeal, and further in view of Priven, does not show that the plural inheritance characteristics include optional inheritance characteristics, wherein an optional inheritance characteristic means that the associated attribute may be inherited by the financial instrument or financial instrument template on one level in the hierarchy from the financial instrument template on the next higher level in the hierarchy. Ku shows that the plural inheritance characteristics include optional inheritance characteristics, wherein an optional inheritance characteristic means that the associated attribute may be inherited by the financial instrument or financial instrument template on one level in the hierarchy from the financial instrument template on the next higher level in the hierarchy (page 1, ¶ 12). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method and the system of Kruskal in view of Lea, further in view of Indeal, and further in view of Priven, by the plural inheritance characteristics include optional inheritance characteristics, wherein an optional inheritance characteristic means that the associated attribute may be inherited by the financial instrument or financial instrument template on one level in the hierarchy from the financial instrument template on the next higher level in the hierarchy of Ku in order to enable PDI to automatically format and unformat object oriented instances in an OOPS (Priven: col. 12, lines 58-60).

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Abdelkrim (2001/0005888 A1) discloses method and programming interface for developing object-oriented software applications using secured calls.

Carey (2003/0172192 A1) discloses method and system for supporting object oriented programming class replacement.

Poff (2002/078115 A1) discloses hardware accelerator for an object-oriented programming language.

Wilson (2004/0216087 A1) discloses system and method for integrating object-oriented model and object-oriented programming languages.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VIRPI H. KANERVO whose telephone number is 571-272-9818. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST. If attempts to reach the

examiner by telephone are unsuccessful, the examiner's supervisor, Alexander G. Kalinowski can be reached on 571-272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Virpi H. Kanervo

/Alexander Kalinowski/

Supervisory Patent Examiner, Art Unit 3691